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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,882	05/31/2000	Yusaku Fujii	1460.1006	1929

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EXAMINER

TRAN, TONGOC

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 10/27/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/583,882

Applicant(s)

FUJII ET AL.

Examiner

Tongoc Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 31 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to applicants' application no. 09/583,882 filed on 5/30/2000.

#### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/583,882, filed on 5/31/2000.

#### ***Claim Objections***

3. Claims 7 and 15 are objected to because of the following informalities: The terms "An" in claim 17 and "A" in claim 15 appears to be typographical errors. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

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Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Buffam (U.S. Patent No. 6,185,316).

7. In respect to claim 1, Buffam discloses a cryptographic method comprising the steps of:

“receiving physical characteristic information representing a characteristic inherent to an individual (see col. 7, lines 54-58);

randomly determined a numeric key (see col. 8, lines 1-4);

generating a cryptographic key from said numeric key and a predetermined primary key (see col. 8, lines 1-11);

encrypting said physical characteristic information using said cryptographic key (see col. 8, lines 5-11 and col. 14, lines 30-44); and

generating an auxiliary code for decrypting said cryptographic key, from said encrypted physical characteristic information and said numeric key” (see col. 8, lines 29-38);

8. In respect to claim 2, Buffam discloses a decryption method comprising the steps of:

“receiving encrypted physical characteristic information and an auxiliary code (see col. 8, lines 28-39);

restoring a numeric key from said numeric key and a predetermined primary key  
(see col. 8, lines 33-36); and

decrypting said encrypted physical characteristic information by using said  
cryptographic key and obtaining physical characteristic information" (see col. 8, lines 29-  
39).

9. Claims 3 and 4 are apparatus claims that are substantially equivalent to method  
claims 1 and 2, respectively. Therefore claims 3 and 4 are rejected by a similar  
rationale.

10. Claims 5 and 6 are computer readable medium claims that are substantially  
equivalent to method claims 1 and 2, respectively. Therefore claims 5 and 6 are  
rejected by a similar rationale.

11. In respect to claim 7, Buffam discloses a cryptographic method comprising the  
steps of:

"receiving physical characteristic information representing a characteristic  
inherent to an individual (see col. 8, lines 5-7);

arithmetically converting each component of said physical characteristic  
information by using a predetermined function concerning said each component and a  
plurality of components having a predetermined relationship with said each components  
having a predetermined relationship with said each component, to scramble said  
physical characteristic information (see col. 8, lines 1-11 and col. 14, lines 30-44); and

encrypting the scrambled physical characteristic information by using the  
predetermined cryptographic key" (see col. 8, lines 5-11 and col. 14, lines 30-44).

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12. In respect to claim 8, Buffam discloses a decryption method comprising the steps of:

“receiving a cryptogram which is an encryption of scrambled physical characteristic information (see col. 8, lines 29-33) ;

decrypting said cryptogram by using the predetermined cryptographic key and obtaining said scrambled physical characteristic information (see col. 8, lines 29-39 and col. 14, lines 30-44); and

descrambling said scrambled physical characteristic information by removing each element from each component constructing the result of decryption, in which each element is effected at the time of scrambling, by a plurality of components that has a predetermined relationship with said each component (see col. 8, lines 29-39).

13. Claims 9 and 10 are apparatus claims that are substantially equivalent to method claims 7 and 8, respectively. Therefore claims 9 and 10 are rejected by a similar rationale.

14. Claims 11 and 12 are computer readable medium claims that are substantially equivalent to claims 7 and 8, respectively. Therefore claims 3 and 4 are rejected by a similar rationale.

### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buffam (U.S. Patent No. 6,185,316) in view of Raiké (U.S. Patent No. 5,799,088).

17. In respect to claim 13, Buffam discloses a remote identification system comprises "a client-side equipment and server-side equipment (see col. 23, lines 1-7), wherein:

said client-side equipment comprising inputting means for inputting physical characteristic information representing a characteristic inherent to an individual (see col. 11, line 58-col. 12, line 3);

proof information inputting means for inputting information including identifier or identifying an individual and a password (see col. 2, lines 31-45);

outputting means for outputting authenticating information generated from said cryptogram and said identifier (see col. 8, lines 28-39);

said server-side equipment comprising registering means for registering password and reference data which is obtained by measuring a physical characteristic corresponding to each individual, relating to given identifier corresponding to each person (see col. 11, line 58-col. 12, line 3);

receiving means for receiving authenticating information consisting of said cryptogram and said identifier (see col. 8, lines 28-39);

retrieving means for retrieving a relating password and reference data from said registering means in accordance to received identifier (see col. 8, lines 5-11);

decrypting means for decrypting said received cryptogram by using a random numeric key retrieved by said retrieving means as a cryptographic key and obtaining a physical characteristic information (see col. 8, lines 28-39); and

examining means for examining whether or not said physical characteristic information and retrieving reference data are equivalent (see col. 2, lines 31-45).

Buffam discloses encrypting means for encrypting said physical characteristic information using a random numeric key and a predetermined primary key as a cryptographic key and outputting random numeric key as a cryptographic key and outputting a cryptogram (see col. 8, lines 1-11) but does not disclose using a password as a cryptographic key. However, Raike discloses using a password to generate a cryptographic key (see col. 31, lines 3-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teaching of Raike by using a password to generate a cryptographic key to speed up the key generation process.

18. In respect to claims 14 and 15, the limitations are similar to claim 13 and therefore are rejected by the similar rationale.

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Sourtar et al. disclose a method for secure key management using a biometric.
- Tomko et al. disclose a biometric controlled key generation.



-Holloway discloses a transaction processing system having means to retrieve characteristic data from a user.

-Gray discloses an apparatus and method for providing an authentication system based on biometrics.

-Lambert et al. disclose a method for controlling access to electronically provided services and system for implementing such method.

-Schell et al. disclose a module authentication and binding library extensions.


20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (703) 305-7690. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-9600.

Examiner Tongoc Tran  
Art Unit: 2134

TT  
October 3, 2003

  
MATTHEW SMITHERS  
PRIMARY EXAMINER  
*Art Unit 2134*